

grows in great quantity along the bottom lands of the various streams flowing into Puget sound, and this is cut by the settlers and loggers and sold to the company. Logs are taken to the mill in rafts or on barges, cut to twice the length of a stave, and are known as "stave bolts." In the appointments of the new mill rapidity and economy of handling material have been well considered. A steam engine located on a ledge separate from the mill buildings supplies power to draw the bolts out of the water, run the machinery of the mill and operate an electric dynamo by which the entire town and works will soon be lighted with both arc and incandescent electric lights. The bolts are hauled up an incline, at the head of which they encounter a saw that quickly saws them into lengths for staves. After being steamed, another cuts them to the proper thickness, and a third machine shapes them so that when put together they will have the required bilge in the center. They are then tied up in bundles, loaded on cars and passed through the dry kiln, where they are thoroughly seasoned, and are then stored away for use. Heads are made from bolts of a different length. The slabs, after being sawed out of the bolt and being thoroughly kiln dried, are laid at proper widths on another machine and sawed into round and perfect heads, three pieces usually going into one head. The heads are then barreled up and laid away for future use or for shipment, it being the purpose of the company to supply staves and heads for the general market, also. Shingles and box material of all kinds will also be made in order to



SETTING UP.

keep the saws busy when they have accumulated material beyond the capacity of the other machines. In the cooper shop a busy and interesting scene is witnessed, and the ring of the hammers on the resonant barrels is heard from one end of the long shop to the

other. The coopers work in sets of four, grouped about a stove, upon which the barrels are heated after being "set up" and before "hooping." From a pile of staves the cooper selects enough to make a barrel and places them in position by confining the upper ends in a heavy hoop and letting the lower ends rest upon the ground. Another hoop is then driven down toward the center of the barrel. The barrel is then reversed and the upper ends of the staves, which are narrower than the center and are about two inches apart, are drawn together by a rope loop placed over the ends and tightened by power from a treadle or windlass sufficiently to permit another strong hoop to be slipped over the top. The barrel is then set over a drying cylinder on the stove, and when sufficiently dry the regular hoops are adjusted, the heads set in, the edges of the staves planed, chamfered and crozed, and the completed barrel is then rolled along an incline to a warehouse, where it is stored for seasoning. Hoops are made of hazel, vine maple and fir, and are in the main cut by settlers during leisure hours in the winter season, put into bunches of one hundred hoops each, and traded to store keepers for goods, from whom they are purchased by barrel manufacturers. An immense stock of materials and completed barrels is always kept on hand, the company usually carrying a stock of one hundred thousand sets of staves and heads, five hundred thousand hoops and twenty thousand barrels. Mr. Andrew Fauble is foreman of the cooperage department.

As soon as the new wharf is finished a quarry will be opened for the purpose of getting out building stone, of which this marble supplies the finest quality. The marble is of a beautiful gray tint, with white crystals scattered through it in veins and groups, and takes a very high polish. For mantels, table tops, and furniture of all kinds, it is as fine as the best that can be seen in the market anywhere, and for building purposes it is unequalled on this coast. It can be quarried in blocks of any size and shape desired, and is especially valuable for large monuments. As soon as the proper shipping facilities are completed, the great demand now made for this stone will be supplied, and Roche harbor marble will soon become as famous as Roche harbor lime. The new dock will be provided with tracks for hauling the heavy blocks of stone in cars, power for which will come from the compressed air engine, and the dock is so planned that four vessels and scows can be loading at the same time.

The company owns nine hundred acres of land, much of which is covered with valuable timber, and from which it cuts its own wood, using thirty cords a day. It owns all the land enclosing the harbor, including Pearl island opposite the works, and every